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57449                      7590                      02/14/2008 SHEEHAN PHINNEY BASS & GREEN, PA c/o PETER NIEVES 1000 ELM STREET MANCHESTER, NH 03105-3701				
EXAMINER				
HADZONOOZ, BANAPSHEH				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/864,885

**Applicant(s)**

RUKAVINA ET AL.

**Examiner**

Banafsheh Hadizonooz

**Art Unit**

3714

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 27 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 11, 12, 16, 17, 22, 24, 25, 32, 33, 37, 39-41 and 43-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11, 12, 16, 17, 22, 24, 25, 32, 33, 37, 39-41 and 43-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **Detailed Action**

In response to the amendment filed on 11/05/2007, claims 1-4, 11, 12 16 17, 22 24, 25, 32, 33, 37, 39-41, 43-58 are pending. This office action is made Final.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 2, 11, 17, 24, 25, 49, 50-54, and 56-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Whitehurst et al ( US 2002/0142278)**

[Claims 1,49]: Whitehurst disclose a system and method for training, comprising: a data base (e.g. data source) for storing a plurality of reusable learning objects (e.g. course data) and a profile of at least one student (e.g. student/class data) that defines a plurality of course requirements of the student; and a dynamic rendering engine (e.g. learning management system) adapted and configured to create an individualized course for the student by assembling a subset of the learning objects in response to an assessment item (e.g. assessment engine) designed to evaluate whether the student

has mastered a learning objective, wherein learning objects are unassembled immediately prior to delivery (See Figure 2 and P.1,[0008]).

[Claims 2,11]: Regarding claim 2, Whitehurst further discloses a system, wherein each of the learning objects represents a discrete element of the e-learning course (e.g. audio files, text files, etc) (See P.2, [0010]).

With respect to claim 11, Whitehurst discloses a system, wherein the dynamic rendering engine delivers the e-learning course to the student via a computer network (See P.2, [0018]).

[Claims 17, 50]: Whitehurst discloses an authoring tool (e.g. content development engine) operable to create a plurality of learning objects, wherein at least one of the learning objects includes an assessment item for determining the learning objects containing learning objectives of the student (See Figure 1, and P.2, [0011]); a dynamic delivering tool operable to deliver a course page of instruction embodying at least one learning object, wherein the course page is dynamically assembled by the e-learning tool in response to determining characteristic of the student by evaluating the assessment item; and a learning management system containing student's profile. (See P.1, [0008]).

[Claim 24, 25]: Whitehurst discloses learning management system presents course information to the student in a form of a campus that summarizes which of a plurality of courses are available to the student and which of the available courses the student has taken (See P.5, [0035]); the system further comprises a data base for

storing the plurality of learning objects and students profile (See P.2, [0010], P.4, [0030]).

[Claim 51, 52]: Claims 51 and 52 are an article of manufacture, which comprise a computer readable medium having stored thereon instructions for carrying out the system of claim 1.

[Claim 53]: Whitehurst further discloses assessing the characteristic of the student using the assessment item includes testing the student prior to any other e-learning experience (See P.3, [0021]).

[Claim 54]: Whitehurst further discloses wherein the learning objects are dynamically assembled and rendered by dynamic rendering engine as a second course page when the student clicks on a button (next concept button) on a first course page (See P.5, [0037] and [0039]).

[Claim 56, 57]: With respect to claim 56, Whitehurst further discloses receiving a student input, and in response dynamically assembling a set of at least one selected discrete object and transmitting the set of at least one selected object (See P.3, [0020]).

As per claim 57, Whitehurst further discloses sending at least one question to a subject to be tested, receiving response to the at least one question (See P.3, [0021]).

[Claim 58]: Whitehurst discloses a method of continuing an e-learning session after having received a response to a question (e.g. testing the mastery of prerequisite course), and transmitting the second portion of the e-learning session (See P.5, [0037]).

**Claims 3, 4, 12, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehurst et al (US 2002/0142278) in view of Cook (US 6, 201, 948).**

[Claims 3, 4, 22]: With respect to claims 3 and 4, Whitehurst discloses a system for training in an adaptive manner, wherein the results of the students' assessment are stored in student profile (e.g. data store). Whitehurst does not specifically disclose that the student profile includes a technological capability of a computer system being utilized by the student, wherein the technological capability is bandwidth available to the student. Cook discloses that the profile includes a technological capability of a computer system being utilized by the student (See Col. 7, 17-21), wherein the technological capability is bandwidth available to the student for receiving the e-learning course (See Col.20, 29-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the features of the Cook's invention into the limitations of the system of Whitehurst in order to assess the student's performance objectively.

[Claim 12]: Regarding claim 12, Cook's invention further comprises a template-based authoring engine for generating the learning objects (Col. 31, 38-55).

**Claims 32, 33 and 43-48 are rejected under 35 U.S.C 103(a) as being unpatentable over Cook (US 6,201,948) in view of DeNicola et al (US 6,288,753)**

[Claims 32, 43-48]: Regarding claims 32, 47 and 48, Cook further discloses a first software application that receives e-learning content, each discrete element

representing a separate characteristic of the e-learning course and its presentation. The classes of discrete elements having pre-defined behaviors and relationships there between (See Figs.2A and 6; Col. 21, 16-30), a second software application that receives information regarding a student's requirements for the course (See Figs 2A and 6 element 603; Col.32, 48-60), and a third software application that correlates the received information with the classes of discrete elements so as to automatically and dynamically assemble and render the discrete elements as an e-learning course customized to the individual requirements of the student (See Fig. 6 element 604; Col. 4,57- Col.5, 3) also (Col.37, 30-45). Cook does not expressly disclose categorizing the content into discrete elements. However, DeNicola discloses storing the contents as discrete element (e.g. learning objects) (See Col.5, 17-29). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the features of the DeNicola's invention into the system and method of Cook's invention in order to design a more dynamic system.

Claim 43 is an article of manufacture, which comprises a computer readable medium having stored thereon instruction for carrying out a system of claim 32.

As per claim 44, Cook further discloses the article of manufacture of claim 43, wherein the requirements of the user include a language preference of the user (See Col.26, 52-59), a technological capability of a computer system used by the user to access the e-learning content (See Col. 21, 16-30), and information as to e-learning content with which the student is familiar.

With respect to claim 45, Cook further discloses the article of manufacture of claim 44, wherein the requirements of the user are separately stored within a database profile (Col. 14, 21-28), and further wherein the third code segment determines the subset of learning objects by semantically matching the requirements to the subset of learning objects (Col. 24, lines 15-29).

Regarding claim 46, Cook further discloses the article of manufacture of claim 43, wherein the first code segment further comprises: a code segment for presenting a plurality of templates to a course developer, for entering the course content into the templates for accumulation (Col. 4, 41-45).

Claims 47 and 48 disclose means for carrying out claim 43.

[Claims 33]: Regarding claim 33, Cook discloses a system, wherein the student information identifies a language preference of the student, a technological capability of a computer system used by the student to access the e-learning content, and information as to e-learning content with which the student is familiar (See Col.7, 17-21 and Col.26, 52-59).

**Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehurst et al (US 2002/0142278) in view of DeNicola et al. (US 6, 288,753).**

[Claim 37]: Regarding claim 37, Whitehurst discloses storing a plurality of discrete objects within database and assembling and delivering the page including at least one of the learning objects in response to an input from the user based upon assessment item designed to evaluate student's mastery of subject (See P.1, [0008] and P. 5, [0037]). However, Whitehurst does not expressly disclose delivering the



information in real-time to the user. Denicola discloses a system for live interactive learning wherein the information are transferred to the students in real time (See Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the features of DeNicola's invention into the system of Whitehurst in order to design a fast and efficient e-learning system.

**Claims 39-41 and 55 are rejected under 35 USC 103(a) as being unpatentable over Whitehurst et al (US 220/0142278) in view of DeNicola et al (US 6, 288,753) as applied to claim 37 above and further in view of Cook et al ( US6, 201, 948).**

[Claim 39]: With respect to claim 39, Whitehurst/ DeNicola do not specifically disclose a template based authoring tool. Cook discloses creating the learning objects by utilizing a template-based authoring tool (See Col.31, 38-55). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the features of Cook's invention into the system of Whitehurst/DeNicola In order to design a more efficient learning system.

[Claims 40, 41, 55]: As per claim 40 and 55, Cook further discloses, wherein said assembling and delivering the at least one of the learning objects in response to an input from the user in approximately real-time to the user, based upon individual delivery parameters of the user further comprises: comparing semantic elements of a subset of the learning objects with semantic elements of a plurality of profile objects that profile the individual delivery parameters of the user (See Col.24, 15-29).

As per claim 41, Cook discloses that the individual delivery parameters of the user include a language preference of the user, a technological capability of a computer system used by the user to access the e-learning content, and information as to e-learning content with which the student is familiar (See Col.7, 17-21).

### ***Response to Arguments***

Applicant's arguments filed 11/05/2007 have been fully considered but they are not persuasive.

Applicant argues that Whitehurst does not include the feature of unassembling learning objects prior to their delivery. In claim 1, the applicant discloses that the objects are assembled in response to an assessment item which evaluates the students' mastery of learning subjects. It is not clear to the examiner as to why the learning objects would be disassembled prior to delivery. If the applicant means that the learning objects are disassembled in order to be stored back in the data base, Whitehurst inherently includes this feature. In Whitehursts' invention, all the "concepts" are stored separately and the "course builder" only assembles the concepts based on students' need, and stores the concepts separately back in the memory (See Figure 1).

Regarding claims 17 and 58 the applicant further argues that the system in Whitehurst's invention does not dynamically or adaptively assemble and delivers a course page. The examiner notes that Whitehurst specifically mentions that the system

intelligently modifies the course material presentation to better suit students' learning style (See P.3, [0020]).

With respect to claim 51, the applicant argues that Whitehurst's invention does not disclose an assessment item designed to evaluate students' mastery of subject by a first code segment. Examiner notes that Whitehurst specifically disclose an assessment engine (See figure1, element 14 and [0033]). Whitehurst further inherently includes first and second code segments to perform the tasks mentioned in claim 51 and 52.

With respect to applicant's argument regarding claims 56 and 57, examiner notes that Whitehurst discloses that the system intelligently modifies the presentation of the course material. This statement clearly indicates that the system of Whitehurst's invention is in fact dynamic. Whitehurst further discloses that the system develops the presentation of course material, which could be in the form of a page. The course materials are discretely stored in data source (See figure 2, element 20).

Regarding claim 32, the applicant argues that Cook/DeNicola does not disclose all the features of claim 32. Examiner notes that Cook discloses that the material engine receives the course contents to form a presentation (See Col.37, 30-45). DeNicola also discloses creating learning object characteristics (e.g. descriptions, course and class relevance, test/question/answer relevance and associated graphics) to form learning objects and eventually assembling the learning objects to form an e-learning course (See Col.6, 6-21).

With respect to claim, examiner points the applicant's attention to Col.6, where it says that the e-learning pages (e.g. presentations) are assembled pertinent to a request

from the end user browser and instantaneously presenting them to the user. The content of the cited paragraph clearly implies that the e-learning course is dynamically delivered to the user, and it consists of discrete objects.

Regarding claim 43, the examiner draws the applicant's attention to Col.6, 6-21, wherein the learning objects are assembled to form an e-learning course immediately prior to delivery. The learning objects are stored in database and therefore are reusable.

With respect to claim 47, Software entities refer to the learning objects and the argument of claim 1 also applies to claim 47.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Banafsheh Hadizonooz whose telephone number is 571-272-1242. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272- 6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BH

2/11/2008

/Robert E Pezzuto/  
Supervisory Patent Examiner, Art Unit 3714